

PCT/SE99/02486

CLAIMS

1. Gas discharge tube comprising at least two electrodes and at least one hollow insulator fastened to at least one of the electrodes, and whereby said at least two electrodes have a chemically inert surface,
- 5 characterized in that the chemically inert surface has been arranged onto the electrodes using a physical vapour deposition or a chemical vapour deposition.
- 10 2. Gas discharge tube according to claim 1, wherein the chemically inert surface is selected from the group of carbon, gold, and platinum.
3. Gas discharge tube according to claim 1,
- 15 wherein the carbon is arranged in addition of a metal.
4. Gas discharge tube according to claim 1, wherein the metal is chromium or titanium.
- 20 5. Gas discharge tube according to claim 1-4, wherein said carbon is present as polymorph of carbon, such as diamond, diamond-like carbon or graphite.
6. Gas discharge tube according to claim 5,
- 25 wherein the carbon is present as graphite in addition to a metal.
7. Gas discharge tube according to one or more of claims 1-6, wherein the carbon has been arranged using sputtering.
- 30 8. Gas discharge tube according to one or more of the preceding claims, wherein the carbon is present in a layer having a thickness of 1 μm .

9. Method for the manufacture of gas discharge tubes comprising at least two electrodes, and at least one hollow insulator fastened to the electrodes, and whereby said at least two electrodes have a chemically inert surface, characterized in

5 that the chemically inert surface is applied onto the electrodes using a physical vapour deposition or a chemical vapour deposition.

10 10. Method according to claim 9, wherein the chemically inert surface is selected from the group of carbon, gold, and platinum.

11. Method according to claim 10, wherein the carbon is arranged in addition of a metal.

15 12. Method according to claim 11, wherein the metal is chromium or titanium.

20 13. Method according to claim 9-12, wherein said carbon is present as polymorph of carbon, such as diamond, diamond-like carbon or graphite.

14. Method according to claim 13, wherein the carbon is present as graphite in addition to a metal.

25 15. Method according to one or more of claims 9-14, wherein the carbon has been arranged using sputtering.

16. Method according to one or more of claims 9-15, wherein the deposition of carbon takes place in an atmosphere of methane.

30 17. Method according to claims 9-16, wherein the carbon is present in a layer having a thickness of 1 μm .